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Mr. R. Douglas Neeley, Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics Management Division
United States Environmental Protection Agency, Region 4
61 Forsyth Street
Atlanta, Georgia 30303-8960

BUREAU OF
AIR REGULATION

**RE: RAYONIER PERFORMANCE FIBERS, LLC
FERNANDINA BEACH MILL
BLEACH PLANT SCRUBBER - ALTERNATIVE MONITORING REQUEST**

Dear Mr. Neely:

Rayonier Performance Fibers, LLC (Rayonier) operates a sulfite based pulp mill located in Nassau County, Florida. On behalf of Rayonier, Golder Associates Inc. is submitting this request for the use of an alternative monitoring parameter for the new Bleach Plant scrubber. Rayonier has installed this scrubber to comply with the requirements of the maximum achievable control technology (MACT) standards for control of hazardous air pollutants (HAPs) emitted from bleaching systems under Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63), Subpart S. Through submission of this request, Rayonier is requesting the ability to monitor the on/off operation of the bleach plant exhaust gas fan as an alternative to monitoring the gas scrubber vent gas inlet flow rate, as required by §63.453(c)(2).

The Bleach Plant scrubber, authorized by Air Construction Permit No. 0890004-021-AC, was placed into operation on February 19, 2010. The scrubber controls emissions from all bleach plant system equipment where chlorinated compounds are introduced. To demonstrate compliance with the chlorinated HAP emission limit in §63.445(c), Rayonier is scheduled to perform an initial performance test on April 28, 2010.

To assure compliance with the emission standards contained in Subpart S, §63.453 provides continuous monitoring system (CMS) requirements for scrubbers used to control chlorinated HAP emissions from bleaching systems. According to §63.453(c), Rayonier is required to operate a CMS to measure each of the following scrubber parameters:

- The pH or the oxidation/reduction potential of the gas scrubber effluent
- The gas scrubber vent inlet flow rate
- The gas scrubber liquid influent rate

According to §63.453(m), Rayonier may also establish an alternative operating parameter to be monitored that demonstrates continuous compliance with the applicable control requirements. This provision allows facilities to establish an alternative monitoring parameter in lieu of a monitoring parameter provided in §63.453(c) that may not be practical for certain control device environments. The pulp and paper industry has determined that the accuracy of available gas flow rate monitors has not been demonstrated in the chlorinated environment associated with bleach plant scrubber systems.

In response to the pulp and paper industry's concern regarding the lack of available flow rate monitors for bleach plant systems, the U.S. Environmental Protection Agency (EPA) provided guidance in the document titled *Questions and Answers (Q&A's) for The Pulp and Paper NESHAP* (September 22, 1999). On page 9 of the document, EPA provides the following guidance:

Gas flow rate is a direct function of the speed of the fan used to convey vent gas streams to the gas scrubber. The fans used to convey vent gases to gas scrubbers are typically



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operated at constant speeds, therefore, the operation of these fans would be a reliable monitoring parameter. However, if the fan speed drops below the level measured during the performance, gas scrubber performance should improve because the liquid-to-gas ratio of the gas scrubber increases when the gas flow drops.

Therefore, we will allow you to monitor fan operation instead of gas flow rate as long as a successful initial performance test of the gas scrubber is conducted while the fan is operating at maximum speed. Allowable monitoring parameters of fan operation include fan motor amperage, on/off status, or rotational speed of the fan. Any of these methods could be used to satisfy the monitoring requirements for the gas scrubber inlet flow rate specified in §63.453(c)(2).

Through submission of this request, Rayonier is proposing to monitor fan on/off status to satisfy the monitoring requirements for the gas scrubber inlet flow rate specified in §63.453(c)(2). During the initial compliance test, Rayonier will continuously monitor fan on/off status, oxidation/reduction potential of the gas scrubber liquid effluent, and gas scrubber liquid influent (recirculation) rate. Rayonier has developed a site-specific performance test plan to comply with the requirements of §63.7 and §63.8. The test plan will be made available upon request.

In accordance with the requirements of §63.453(n), Rayonier will use the results of the initial compliance test to determine the appropriate parameter value, monitoring frequency, and averaging time for each of the proposed scrubber parameters. Rayonier will provide a report to the administrator which will include the rationale for the selected operating parameter values, monitoring frequency, and averaging times. The report will include all data and calculations used to develop the value and a demonstration that the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emissions standards. Rayonier will submit the test report to the Administrator within 60 days of completing the initial performance test.

Thank you for considering this information. Please call me at (352) 336-5600 if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

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Principal Engineer

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JDP/tz